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RAW SEQUENCE LISTING

DATE: 12/04/2002

PATENT APPLICATION: US/09/720,314B

TIME: 12:44:06

Input Set : A:\EP.txt

Output Set: N:\CRF4\12032002\I720314B.raw

```

3 <110> APPLICANT: Biosearch Italia Spa
5 <120> TITLE OF INVENTION: METHODS FOR TRANSFERRING THE CAPABILITY TO PRODUCE A NATURAL
6   PRODUCT INTO A SUITABLE PRODUCTION HOST
8 <130> FILE REFERENCE: G67773RS/mg
10 <140> CURRENT APPLICATION NUMBER: US/09/720,314B
11 <141> CURRENT FILING DATE: 2000-12-22
13 <150> PRIOR APPLICATION NUMBER: EP98111506.6
14 <151> PRIOR FILING DATE: 1998-06-23
16 <150> PRIOR APPLICATION NUMBER: EP99107554.0
17 <151> PRIOR FILING DATE: 1999-04-15
19 <160> NUMBER OF SEQ ID NOS: 38
21 <170> SOFTWARE: PatentIn Ver. 2.1
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 44
25 <212> TYPE: DNA
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: Description of Artificial Sequence: oligo probe
31 <400> SEQUENCE: 1
32 gcstacatca tctacacstc sggsacsacs ggsaagccsa aggg          44
35 <210> SEQ ID NO: 2
36 <211> LENGTH: 44
37 <212> TYPE: DNA
38 <213> ORGANISM: Artificial Sequence
40 <220> FEATURE:
41 <223> OTHER INFORMATION: Description of Artificial Sequence: oligo
42   probe
44 <400> SEQUENCE: 2
45 ggstacatca tctacacsag cggsacsacs ggsaagccsa aggg          44
50 <210> SEQ ID NO: 3
51 <211> LENGTH: 41
52 <212> TYPE: DNA
53 <213> ORGANISM: Artificial Sequence
55 <220> FEATURE:
56 <221> NAME/KEY: CDS
57 <222> LOCATION: (19).(20)
58 <223> OTHER INFORMATION: Description of Artificial Sequence: oligo probe
60 <400> SEQUENCE: 3
W--> 61 akgtgtgtcsc cscacsagsnn gaagaagtyg tegtgtgatc c          41
64 <210> SEQ ID NO: 4
65 <211> LENGTH: 41
66 <212> TYPE: DNA
67 <213> ORGANISM: Artificial Sequence

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69 <220> FEATURE:
70 <221> NAME/KEY: CDS
71 <222> LOCATION: (19).(20)
72 <223> OTHER INFORMATION: Description of Artificial Sequence: oligo probe
74 <400> SEQUENCE: 4
W--> 75 akggagtcsc cscsagsnn gaagaagtyg tcgtcgatc c 41
78 <210> SEQ ID NO: 5
79 <211> LENGTH: 29
80 <212> TYPE: DNA
81 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
86 <400> SEQUENCE: 5
87 tttttgtac ctgacgtccc gaaggcgtg 29
90 <210> SEQ ID NO: 6
91 <211> LENGTH: 18
92 <212> TYPE: DNA
93 <213> ORGANISM: Artificial Sequence
95 <220> FEATURE:
96 <223> OTHER INFORMATION: Description of Artificial Sequence:PCR primer
98 <400> SEQUENCE: 6
99 cagcttggtcc atggcgga 18
102 <210> SEQ ID NO: 7
103 <211> LENGTH: 20
104 <212> TYPE: DNA
105 <213> ORGANISM: Artificial Sequence
107 <220> FEATURE:
108 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
110 <400> SEQUENCE: 7
111 tctgtccgcc atggacaagc 20
114 <210> SEQ ID NO: 8
115 <211> LENGTH: 32
116 <212> TYPE: DNA
117 <213> ORGANISM: Artificial Sequence
119 <220> FEATURE:
120 <223> OTHER INFORMATION: Description of Artificial Sequence:PCR primer
122 <400> SEQUENCE: 8
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126 <210> SEQ ID NO: 9
127 <211> LENGTH: 200
128 <212> TYPE: DNA
129 <213> ORGANISM: Planobispora rosea
131 <400> SEQUENCE: 9
132 ggatcccgag caccgaccag ccgtgggcgg ggacgagaca cgggtctccc ggagcctccc 60
133 ccgacgactc cagcacggcc aggccgcgg cctcgaccgg gaagcggtag ggctgtcgt 120
134 ccacggttga gcagggtgag cagtgcccg ccgggatggt ccgggtcagc cgaggccagc 180
135 gcggcgggccc ggttgctcag 200
138 <210> SEQ ID NO: 10
139 <211> LENGTH: 200

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140 <212> TYPE: DNA
141 <213> ORGANISM: Planobispora rosea
143 <400> SEQUENCE: 10
144 ggatccccgag caccgaccag ccgtgggcgg ggacgagaca cgggtctccc ggagcctccc 60
145 ccgacgactc cagcacggcc aggccgcgg cctcgaccgg gaagcggtag ggccgtgcgt 120
146 ccacggttga gcagggtgag cagtgcggcg ccgggatggt ccgggtcagc cgaggccagc 180
147 gcggcgcccc ggttgctcag                                     200
150 <210> SEQ ID NO: 11
151 <211> LENGTH: 16
152 <212> TYPE: DNA
153 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <223> OTHER INFORMATION: Description of Artificial Sequence: linker
158 <400> SEQUENCE: 11
159 gatctaagct tggggg                                     16
162 <210> SEQ ID NO: 12
163 <211> LENGTH: 12
164 <212> TYPE: DNA
165 <213> ORGANISM: Artificial Sequence
167 <220> FEATURE:
168 <223> OTHER INFORMATION: Description of Artificial Sequence: linker
170 <400> SEQUENCE: 12
171 cccccaagct ta                                     12
174 <210> SEQ ID NO: 13
175 <211> LENGTH: 21
176 <212> TYPE: DNA
177 <213> ORGANISM: Artificial Sequence
179 <220> FEATURE:
180 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
182 <400> SEQUENCE: 13
183 gagctctcat gtttgacagc t                                     21
186 <210> SEQ ID NO: 14
187 <211> LENGTH: 24
188 <212> TYPE: DNA
189 <213> ORGANISM: Artificial Sequence
191 <220> FEATURE:
192 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
194 <400> SEQUENCE: 14
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198 <210> SEQ ID NO: 15
199 <211> LENGTH: 29
200 <212> TYPE: DNA
201 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
206 <400> SEQUENCE: 15
207 tttttgaatt cggtaccagc cgacggcga                                     29
210 <210> SEQ ID NO: 16
211 <211> LENGTH: 29

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212 <212> TYPE: DNA
213 <213> ORGANISM: Artificial Sequence
215 <220> FEATURE:
216 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
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219 ttttttgatc cctgttccac cagcgcacc                29
222 <210> SEQ ID NO: 17
223 <211> LENGTH: 29
224 <212> TYPE: DNA
225 <213> ORGANISM: Artificial Sequence
227 <220> FEATURE:
228 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
230 <400> SEQUENCE: 17
231 ttttttctag accgtcgtcg gtggttctc                29
234 <210> SEQ ID NO: 18
235 <211> LENGTH: 29
236 <212> TYPE: DNA
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
242 <400> SEQUENCE: 18
243 ttttttgatc caggaagccc tgtgctgtc                29
246 <210> SEQ ID NO: 19
247 <211> LENGTH: 29
248 <212> TYPE: DNA
249 <213> ORGANISM: Artificial Sequence
251 <220> FEATURE:
252 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
254 <400> SEQUENCE: 19
255 ttttttgtag aggtcaagat ccggggcat                29
258 <210> SEQ ID NO: 20
259 <211> LENGTH: 29
260 <212> TYPE: DNA
261 <213> ORGANISM: Artificial Sequence
263 <220> FEATURE:
264 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
266 <400> SEQUENCE: 20
267 tttttctgca ggacagcgcc cttgaggtg                29
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271 <211> LENGTH: 26
272 <212> TYPE: DNA
273 <213> ORGANISM: Artificial Sequence
275 <220> FEATURE:
276 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
278 <400> SEQUENCE: 21
279 tttttctgca ggcgacgaag aggggc                26
282 <210> SEQ ID NO: 22
283 <211> LENGTH: 28
284 <212> TYPE: DNA

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DATE: 12/04/2002

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TIME: 12:44:06

Input Set : A:\EP.txt

Output Set: N:\CRF4\12032002\I720314B.raw

285 <213> ORGANISM: Artificial Sequence
287 <220> FEATURE:
288 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
290 <400> SEQUENCE: 22
291 tttttaagct tagcgcgacc ggggcggt 28
294 <210> SEQ ID NO: 23
295 <211> LENGTH: 16
296 <212> TYPE: DNA
297 <213> ORGANISM: Artificial Sequence
299 <220> FEATURE:
300 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
302 <400> SEQUENCE: 23
303 catgggaatt cggggg 16
306 <210> SEQ ID NO: 24
307 <211> LENGTH: 12
308 <212> TYPE: DNA
309 <213> ORGANISM: Artificial Sequence
311 <220> FEATURE:
312 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
314 <400> SEQUENCE: 24
315 cccccgaatt cc 12
318 <210> SEQ ID NO: 25
319 <211> LENGTH: 29
320 <212> TYPE: DNA
321 <213> ORGANISM: Artificial Sequence
323 <220> FEATURE:
324 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
326 <400> SEQUENCE: 25
327 tttttggatc cggggcagcg gttggttcc 29
330 <210> SEQ ID NO: 26
331 <211> LENGTH: 29
332 <212> TYPE: DNA
333 <213> ORGANISM: Artificial Sequence
335 <220> FEATURE:
336 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
338 <400> SEQUENCE: 26
339 ttttttctag aaggcagctc cagatgatc 29
342 <210> SEQ ID NO: 27
343 <211> LENGTH: 28
344 <212> TYPE: DNA
345 <213> ORGANISM: Artificial Sequence
347 <220> FEATURE:
348 <223> OTHER INFORMATION: Description of Artificial Sequence: PCR primer
350 <400> SEQUENCE: 27
351 tttttctaga ccggactcgg ccggctcg 28
354 <210> SEQ ID NO: 28
355 <211> LENGTH: 29
356 <212> TYPE: DNA
357 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/04/2002
PATENT APPLICATION: US/09/720,314B TIME: 12:44:07

Input Set : A:\EP.txt
Output Set: N:\CRF4\12032002\I720314B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 19,20

Seq#:4; N Pos. 19,20

VERIFICATION SUMMARY

DATE: 12/04/2002

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TIME: 12:44:07

Input Set : A:\EP.txt

Output Set: N:\CRF4\12032002\I720314B.raw

L:61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0

L:75 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0